REMARKS

Entry of the amendment as well as reconsideration and allowance of the subject application are respectfully requested.

The claim amendments simplify the preamble language and/or improve consistency between claim preambles. None of the amendments raises any new issues.

Claims 1-19 stand rejected under 35 U.S.C. §103(a) as being obvious in view of U.S. Patent Publication 2002/0122406 to Chillariga et al and newly-applied U.S. Patent 5,666,653 to Ahl. This rejection is respectfully traversed.

The claims are directed to optimizing network planning of a mobile telecommunication network by: (1) using a particular configuration of point-to-point (PTP) and point-to-multipoint (PTMP) microwave links in the transport network, which includes a switch site, plural base station controllers, radio base stations, and access terminals for connecting a base station site with a point-to-multipoint BSC hub site , and (2) using the frequency capacity within the network efficiently. The mobile terminals are not part of the transport network. As part of that network planning, the network operator optimizes the transport network links from the base stations (BS) to the base station controller (BSC). These links are often fixed wireless microwave links due to their lower cost and speed of installation.

Traffic data, i.e., number of calls, are collected for each base station and forwarded to the BSC hub sites. Depending on the anticipated traffic levels (or traffic levels determined from testing), the operator plans a capacity for each base station, e.g., 2, 4, or 5 Mbits/sec, and decides whether to allocate a dedicated microwave link to the base station. Typically, a PTMP link is allocated when there is a line-of-sight situation between the hub site and a number of base station

sites. This arrangement allows frequency multiplexing for a more efficient distribution of bandwidth between the base stations, and thereby, improves the network's efficiency.

However, when a base station generates an amount of traffic that approaches the capacity available in the PTMP system, it becomes more efficient to use a PTP link for that connection. Furthermore, if there is no direct line-of-sight between a set of hub sites a combination of PTMP and PTP microwave links can be used. The inventors recognized that a combination of microwave links could be used so that calls requiring higher capacity utilize the same spectrum. See the example "wideband channel"[1] within the PTMP frequency block illustrated at Figure 6 and described at page 10, lines 9-14. All of this is transparent to the mobile terminal because the radio traffic between the mobile terminal and the transport network remains unchanged.

In contrast, Chillariga relates primarily to optimizing the RF communications between the mobile terminal and the base station. The Examiner relies on paragraph 105 of Chillariga as allegedly teaching the claimed network planning for the transport network. But this paragraph describes fast macrodiversity switching, power control, frequency hopping, smart antennas, and repeaters. These features relate to the radio/air interface and not to the transport network interface between the BTSs and BSC. See, e.g., the "fast macrodiversity switching makes it possible to reduce the MS and the BTS transmitter power levels." The MS refers to the mobile radio station 4. The Examiner acknowledges that the BSC and BTSs make up a transport network. The mobile stations (MSs) are not a part of that transport network. Moreover, Chillariga discloses selecting a BTS with the lowest instantaneous path loss for communicating to a particular mobile station for the time period of that one mobile communication [0030].

[1] The term "wideband channel" does not refer to a "wideband channel" over the air interface in a WCDMA system between a mobile and a BS.

Network planning, on the other hand, is the much longer term, overall planning for the infrastructure of the transport network. Once planned, the transport network configuration does not change during an individual mobile communication. So Chillariga does not teach the claimed transport network planning.

The office action alleges that the zone managers in Chillariga correspond to the claimed access terminals. Applicants disagree. Chillariga explains in 0083: "The entities that control the fast macrodiversity switching process are zone managers (ZMs) 13." The zone managers do not provide connection between an RBS site and a base station controller hub. Again, the zone managers control the radio interface between the mobiles and the base stations. They do not connect the base station to any other node, but simply control the traffic to and from the mobiles. The zone managers do not have anything to do with a transport connection between base station and base station controller.

The Examiner also refers to paragraph 36 as alleged describing "allocating a combination of point-to-point links and point-to-multipoint links for the transport network based on the traffic capacity associated with the radio base stations (RBSs)." Applicants disagree. Chillariga does not describe allocating links in the transport network, the transport network being rightly acknowledged by the Examiner including communications between the base stations and base station controllers and not the links between mobiles and the transport network.

Paragraph 0036 (quoted here for convenience) describes wireless communications between mobile and base stations over the air interface:

> The present invention is a communication system for communication using wireless signals in a fast macrodiversity switching environment. The wireless signals include downlink signals to and uplink signals from mobile stations where the wireless signals have bursts in time slots. A plurality of

> transceiver stations have broadcast channels (non-switched) and dedicated channels (switched) for the wireless signals. A base station controller, or other system timing control, establishes the initial timing of bursts, including their initial timing advances, and establishes initial guard bands between bursts. Zone manager means thereafter controls the fast macrodiversity switching of dedicated channels among transceiver stations.

The Examiner's reference to the term broadcast is mistaken. Broadcast channel here refers not to a broadcast communication from a BSC to multiple BSs, but rather from one BS to multiple mobiles. Likewise, dedicated refers to a dedicated channel set up between a mobile and the transport network. Macrodiversity switching of dedicated channels only makes sense in the context of dedicated channel set up between a mobile and the transport network. The PTP and PTMP links recited in the claims relate to links between the BSC and BSs. The mobiles are not part of those PTP and PTMP links.

The Examiner also admits that Chillariga does not teach allocating the transport network links between the transport network nodes (mobiles are not transport network nodes) "based on the traffic capacity associated with the radio base stations." Ahl relates to communication between at least two central stations and a peripheral station—a mobile station (see claim 11). The two co-located central stations transmit radio signals at different frequencies. Special reliance is placed on col. 2, lines 23-25 quoted here:

> In each of said subsystems connected customers share one or several common radio channels or transmissions resources. Fixedly set up or dynamically allocated channels are established for different needs of traffic capacity. Thereby several PS's under each of the CS's commonly can share one radio channel on one frequency band or one pair of frequencies. Varying flows of capacity can be allocated to different customers as parts of the total channel capacity in each of said subsystems.

Again, the channels being allocated relate to radio channels allocated to mobile stations.

Ahl does not describe network planning where communication links between nodes in a transport network are allocated to optimize communication resources in that transport network. Allocating radio channels to mobile stations is just not the same thing. So even if Chillariga and Ahl could be combined as proposed, the modified Chillariga would still not result in what is claimed.

Moreover, the office action does not give a proper motivation to combine Chillariga and Ahl. The Examiner must show reasons why one of ordinary skill in the art, confronted with the same problem as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed. See *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998). The *Rouffet* Court warned against "rejecting patents solely by finding prior art corollaries for the claimed elements" because that would "permit an Examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art." *In re Rouffet*, 149 F.3d at 1357. That approach was found by the Federal Circuit to be "an illogical and inappropriate process by which to determine patentability." *Sensonics v. Aerosonic Corp.*, 85 F.3d 1566, 1570 (Fed. Cir. 1996). Here, the Examiner simply quotes back the language of the independent claims as the motivation for combination. Using Applicants' own claim as motivation to is improper hindsight.

The application is now in condition for allowance. An early notice to that effect is earnestly solicited.

Respectfully submitted,

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